CORRECTIONS TO MY PAPER IN THE JUNE (1911) ISSUE OF THE ANNALS E.S.A.

By CHARLES H. T. TOWNSEND, Piura, Peru.

In a paper about to be published reviewing the results set forth in Pantel's 1910 publication in La Cellule, I stated that the said results were entirely unknown to me at the time of sending in the last proofs and corrections, including the addenda, to my paper in the June (1911) issue of the Annals of the Entomological Society of America. Largely due to this fact but also in part to a regretable haste to present as complete a statement of results to date as possible, I have committed several errors that must be corrected. Aside from certain typographical errors which will be apparent, the following brief statements will serve to cover the points in question:

I should have stated that the spermathecae are "usually" three in number. Pantel has shown that Chaetotachina rustica has only one spermatheca, and Siphona (Pantel et al.) has only two. (Page 127.)

The uterovagina is a vaginal tube which functions anteriorly as a fertilizing but non-incubating uterus when the incubating uterus is absent. It may be pointed out that fertilization is a true function of the muscoid uterus, quite as much so as incubation. must be held for a certain time to insure fertilization. (Page 127.)

Phasia has no uterus and deposits flattened macrotype eggs on host (Pantel). Alophora has likewise no uterus, but evidently deposits its elongate eggs subcutaneously in host (Pantel). Each is the type of a distinct tribe or group unit. (Page 128).

Compsilura, Eucelatoria and allies have a separate piercer and larvipositor in the female. Pantel has first properly described these organs in Compsilura, and I have verified his results in Eucelatoria. The larvipositor is a short subconical membranous tube approximated to the upper base of the elongate curved piercer. The maggets are ejected through the larvipositor within the puncture in the skin of the host made by the piercer. This is more fully explained in the paper above mentioned reviewing Pantel's results, where are also given the functions of the ventral carina of the female. (Pages 130, 140.)

The Peruvian species which I referred to Tricholyga proves to be a typical Euphorocera, truly congeneric with E. tachinomoides T. of the Southwest. (E. claripennis of Coqt. is not a Euphorocera.) (Page 131.)

It is probably a mistake to suppose the existence of a special membranous anal pad for attachment of the maggets of the Hystriciinae to plant surfaces. This is evidently effected by the chorion in whole or part, probably including the vitelline membrane. (Pages 131, 132, 133, 134.)

The Myiophasiine flies are parasites of weevil grubs in buds as well as fruits, as for example cotton buds (squares) and doubtless buds of other plants. (Page 136.)

It seems probable that the Cuterebrine flies have a uterus in which the eggs are partially incubated. The hinged lid of egg is at the cephalic end. (Page 137.)

The piercer-like organ of the female of Emphanopteryx is probably functional in piercing the skin of the host, but this has yet to be demonstrated. (Page 140.)

Celatoria probably has the piercer and larvipositor as separate organs. (Pages 140, 141.)

Phasiatacta has the chorion with alveolae (not areoles) gathered around a dorsal opaque area. (Page 144.)

Pyrrhosia evidently can not go in the tribe Eumyobiini, since Pantel has shown that it has the eggs and maggots regularly arranged in the uterus. (Page 147.)

Certain of the above points are brought out fully in the paper referred to as reviewing Pantel's results, besides many other important points in connection with the subject.

A certain number of the series given represents subfamilies, but the great majority corresponds to tribes. Each series name given in the paper should have the final "E" changed to "I" and serve as the name of a tribe, each tribe taking as its type the type species of the genus from which its name is derived. At least seven families and twenty subfamilies should be recognized in the Muscoidea on the basis of our present knowledge, but it is premature to attempt to define these at present, for further knowledge of the many forms yet to be investigated will quite certainly modify our present conceptions.

The article in "Science" on "Muscoid and especially Tachinid Synonymy" appeared in the issue for June 2, 1911. This and the forthconmig review of Pantel's 1910 paper, which review also includes correlation of results secured by Portchinski a quarter-century ago, taken with the present corrections and the paper to which they refer, will present a fairly complete general statement of the progress of this work up to the early part of the present year, so far as known to me. Further and more extended papers are in preparation.

July 31, 1911.

ENTOMOLOGICAL MEETINGS, DECEMBER, 1911.

The next annual meeting of the Entomological Society of America will be held during Convocation Week at Washington, D. C., on Tuesday, December 26th, and the forenoon of Wednesday, December 27th. The annual public lecture of the Society will be held on Wednesday evening. This lecture will be delivered by Professor J. H. Comstock, of Cornell University. His subject will be "On Some Biological Features of Spiders." Plans are already underway for the meeting and the attention of members is called to the matter at this time so that they may know that every effort possible is being made to make it an instructive and interesting meeting. Every member should plan to be present at the opening meeting.

The annual meeting of the American Association of Economic Entomologists and of the Association of Official Horticultural Inspectors will be held at the same place during this week. The address of the President of the American Association of Economic Entomologists will be held Wednesday afternoon, the sessions for the reading of papers on Thursday, and Friday forenoon. The Horticultural Inspectors will hold their opening session on Thursday evening and other meetings on Friday afternoon.

The Secretary will be glad to furnish members desiring to recommend candidates for membership with the necessary blanks.

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